



The R-7 Modulating Valve is commonly found on trucks and buses with dual air brake systems. The function of the R-7 is to modulate the spring brakes through application of the foot brake valve in the event of loss of rear axle service brake pressure. This action takes advantage of the driver's natural reaction to apply the foot brake valve in an emergency brake situation and eliminates the need to actuate dash mounted controls.

Spring brake pressure is limited to 90-95 PSI by the R-7. Normal parking functions are also controlled through the R-7.

For installation and maintenance, see Instruction and Service Data Sheet SD-03-86.

WEIGHT - 2.5 LBS.

VMRS. NO. 13-010-009

MAINTENANCE KIT FOR R-7

IS PC. NO. 283861.

DEVICE CODE IS 4504

SUB ASSY. AND DETAIL REFERENCE

| R-7 MODULATING VALVE PC. NO. | FOR SERVICE OR REMFR. EXCH USE PC. NO. | CUSTOMER IDENTIFICATION | OUTER SPRING | INNER SPRING | SPRING BRAKE REL. PRESS |
|------------------------------|--|-------------------------|--------------|--------------|-------------------------|
| 283036                       | 283932                                 | NONE                    | 244718       | 235430       | 85 PSI                  |
| 283932                       | 283932                                 | NONE                    | 244718       | 235430       | 85 PSI                  |
| 286195                       | 286195                                 | NONE                    | 244718       | 235430       | 70 PSI                  |
| B101234                      | 103081                                 | FORD D8HS-2B431-AA      | 244718       | 235430       | 95 PSI                  |
| C102144                      | 103081                                 | FORD E2HT-2B431-AA      | 294278       | 294279       | 95 PSI                  |
| C103081                      | 103081                                 | NONE                    | 294278       | 294279       | 95 PSI                  |

B-OBSELETE SUPERSEDED BY 102144

C-SEE PARTIAL VIEW FOR DETAILS. OMIT ITEMS 1, 2 & 24

COMMON SERVICE PARTS

| NO. | PC. NO. | QUAN. | DESCRIPTION         | NO. | PC. NO. | QUAN. | DESCRIPTION            |
|-----|---------|-------|---------------------|-----|---------|-------|------------------------|
| 1   | 283091  | 1     | Cover Complete      | 14  | A       | 1     | Piston O-Ring          |
| 2   | 247250  | 1     | Spring Seat         | 15  | A       | 1     | Cover O-Ring           |
| 3   | A       | 1     | O-Ring              | 16  | A       | 1     | Inlet & Exh Valve Assy |
| 4   | 247249  | 1     | Balance Piston      | 17  | A       | 1     | Check Valve Spring     |
| 5   | 247248  | 1     | Body                | 18  | A       | 1     | Check Valve            |
| 6   | A       | 1     | O-Ring              | 19  | 239949  | 1     | Shuttle Guide          |
| 7   | 240345  | 1     | Retaining Ring      | 20  | A       | 1     | Shuttle Valve          |
| 8   | 247246  | 1     | Control Piston      | 21  | A       | 1     | Cap Nut O-Ring         |
| 9   | 247247  | 1     | Cover               | 22  | A       | 1     | Retaining Ring         |
| 10  | A       | 1     | Diaphragm (Exhaust) | 23  | 247255  | 1     | Supply Adapter         |
| 11  | 240858  | 1     | Exhaust Cover       | 24  | 247209  | 1     | 5/16 - 24 Cap Screw    |
| 12  | A       | 1     | Piston O-Ring       | 25  | 230576  | 1     | 1/4 Pipe Plug          |
| 13  | A       | 1     | O-Ring              | 26  | 242228  | 1     | #10 Threadroll Screw   |

A-FURNISHED IN MAINTENANCE KIT PC. NO. 283861